

**Duwamish/Diagonal Combined Sewer Overflow/Storm Drain
Sediment Cleanup Project**

**Cleanup Action Decision Memo
Public Comment Responsiveness Summary**

**Department of Ecology
July 25, 2002**

Introduction

The Department of Ecology (Ecology), with the assistance of King County, held a public comment period for a draft Cleanup Action Decision Memo (dated May 17, 2002) for the Duwamish/Diagonal Combined Sewer Overflow/Storm Drain Sediment Cleanup Project (D/D project).

The May 17, 2002 draft Cleanup Action Decision Memo proposed that the project was consistent with Washington State Administrative Code (WAC) 173-204 Sediment Management Standards. The memo also noted that Ecology and the U.S. Environmental Protection Agency (U.S. EPA) will continue to work with King County and the Elliott Bay/Duwamish Restoration Panel to address project source control, site boundary and post-cleanup monitoring issues. King County is manager for this project, in partial fulfillment of the 1991 Natural Resources Damage Assessment settlement for Elliott Bay and the Duwamish River between the natural resource trustee agencies, and King County and the City of Seattle.

The original public comment period was scheduled to run from June 2 to June 19, 2002. The Duwamish River Cleanup Coalition (DRCC) requested that a public meeting be held to discuss the project and the draft Cleanup Action Decision Memo. An extension of the comment period was provided until June 26, 2002 to allow for this meeting. The meeting, which was co-hosted by Ecology and the DRCC, was held on June 19, 2002 at the SPARC Building at 8201 10th Ave. South, Seattle 98108. The meeting was attended by approximately 20 people, and ran for 1.5 hours. Ecology, King County and the DRCC considered the discussions held during the meeting to be very productive.

Responsiveness Summary

The purpose of this Responsiveness Summary is to address categories of comments that were received during the public comment period for the draft Cleanup Action Decision Memo. Ecology received seven comment letters and E-mails during the comment period. Most comments were supportive of implementing this project on the current schedule of 2003/4. However, those commenting raised a number of important concerns. The following summarizes the comments that were received, and provides responses.

1. The project should be expanded to address PCB contamination present in the navigation channel adjacent to the cleanup.

While comments supported the 7-acre D/D project (expanded from the original 5-acre proposal), some would like to see the project expanded a second time to include PCB contaminated sediment present in the adjacent navigation channel.

One comment suggested that an accelerated cleanup plan should be developed so that cleanup activities in the channel could occur at the same time that the D/D project is implemented. King County project managers have indicated that many factors would need to be addressed under this scenario, including determining project sponsors for the cleanup, obtaining legal agreements with sponsors, implementing required investigation and cleanup planning studies, obtaining any necessary permits, and contracting for cleanup. Successfully addressing these factors for an accelerated channel cleanup action that could meet the targeted dredging window of November 2003 through March 2004 is highly unlikely.

One comment expressed concern about losing economic efficiency, or risking recontamination if the channel area is not addressed at the same time. According to King County project managers, it is likely that a full dredging season would be required to complete just the 7-acre area, and that the channel area would need to be dredged during a second dredging season. This would require that the contractors and dredging equipment be mobilized a second time for the channel, which would generate additional costs. Also, if the channel area had to be dredged during a second dredging season, any potential risk of recontamination due to dredging becomes a factor that could not be avoided.

One comment suggested addressing the channel area as an Early Action project under Superfund. The goal of this approach would be to have the cleanup action for the channel area implemented during the next dredging season after the D/D project is completed. This suggestion will be discussed with the group working on identifying Early Action projects under Superfund.

Ecology has discussed the pros and cons of moving ahead with the D/D project or delaying the project to incorporate an additional cleanup action for the channel area with the King County project managers. Ecology believes that it is appropriate to proceed with the D/D project as currently planned, while continuing to scope the needs for cleanup in the channel area through the Superfund process.

- 2. Several comments expressed concern that leaving PCB contaminated sediments in the channel would pose a potential recontamination risk to the D/D project even before the channel sediments are dredged.**

According to King County estimates, the recontamination risks to the D/D project from PCB contaminated channel sediments are low. First, the PCB contaminated channel sediments are not located immediately upstream or downstream of the project, which reduces the potential for re-suspension and transport of contaminated channel sediments due to river or tidal flows. Second, contaminated channel sediments are at a depth of -30 feet mean lower low water (MLLW), while the majority of the 7-acre project is at an average depth of -19 MLLW. This difference in depth helps reduce the potential that contaminated channel sediments might re-suspend in the water column to the shallower depth of the project cap, and pose a recontamination risk.

- 3. One comment requested an analysis of information that would justify the conclusion that the risk to salmon and other Duwamish River fish and wildlife is large enough to justify moving forward with the D/D project without also addressing the PCBs in the channel.**

This issue has been evaluated in a qualitative rather than a quantitative manner. PCBs are a known chemical of concern for the Lower Duwamish Waterway. PCBs accumulate up the food chain and have been reported to impact the immune system of juvenile salmon that feed in the river. The shallower depths within the D/D project are more accessible to juvenile salmon and other wildlife than the channel sediments that are at -30 feet MLLW. The ongoing Superfund process will provide a detailed risk assessment for PCBs in the Lower Duwamish Waterway, but even without the results of this assessment, it seems logical to proceed with a cleanup project that can remove substantial amounts of PCBs from this shallower area of the river.

- 4. One comment requested specific references be provided that could verify that the proposed cleanup method of placing a 3-foot thick cap will lock in the PCBs that are left behind in a dynamic river system.**

According to King County, their project consultant has stated that “all caps placed at the site will be designed to comply with EPA and USACE (US Army Corps of Engineers) guidance so that they will be stable.” The two guidance documents referenced below address all factors that are needed to insure that sediment caps are designed to perform as intended. All aspects of cap performance will be evaluated during cap design to verify whether a 3-foot overall cap depth is appropriate for the project, including factors such as erosion, burrowing organisms, and isolation of contaminants. References include:

EPA ARCS In-Situ Capping Guidance EPA 905-B96-004 (Oct 96):
<http://www.epa.gov/glnpo/sediment/iscmain/index.html>

USACE Guidance for Subaqueous Dredge Material Capping, Technical Report DOER-1 (Jun 98): <http://www.wes.army.mil/el/dots/doer/pdf/trdoer1.pdf>

- 5. Several comments pointed out the need for source control activities to minimize potential recontamination of the cap from phthalates or other contaminants discharged from the Diagonal CSO/SD outfall.**

King County, as part of its industrial pretreatment program for discharges to the sewer, routinely performs source control in the basins that periodically drain to the D/D project area through combined sewer overflow events. This program includes inspections, permitting, monitoring, technical assistance and enforcement.

The City of Seattle has also carried out source control inspections in these basins, and is planning to clean contaminated sediments from the lower Diagonal storm drain this summer (2002), which will help prevent recontamination of the D/D project sediment cap. Further source control work in basins draining to the D/D project area is planned by both of these agencies.

As part of the Superfund process for the Lower Duwamish Waterway, Ecology is the lead agency for source control activities. Ecology recognizes the importance of source control for this project, and other sediment cleanup projects that will be implemented in the Lower Duwamish. Ecology is currently working with King County, the City of Seattle, the U.S. EPA and other public agencies that have source control regulatory authority and/or responsibility in the Lower Duwamish, in the development of a source control strategy and plan, and in sharing data, mapping and other information useful to source control efforts. The Diagonal CSO/SD outfall, and any other source control related issues that may impact the D/D project will be addressed by this strategy and plan, and are part of the information sharing effort.

6. One comment requested that the costs of pollution source control for the Lower Duwamish Waterway be billed to the developers and industry that generate the pollutants.

Ecology currently requires that developers, industry and municipalities operate under the appropriate National Pollution Discharge Elimination System (NPDES) permits, which are designed to protect surface water and sediments. Fees are charged for these permits, and there are costs associated with meeting the permit requirements. Depending on the type of development, business or industrial activity under permit, these costs can be significant.

King County also requires industrial waster discharger permits for facilities that discharge to the waste water treatment system. Because the system periodically drains to the D/D project area through combined sewer overflow events, King County's permitting, and associated monitoring, inspection, enforcement, and technical assistance efforts play an important part in control of pollution sources to the Lower Duwamish sediments. To cover its costs, King County charges fees for these permits and for any monitoring required by them. In addition, companies pay construction, pretreatment, monitoring and maintenance costs associated with meeting the permit requirements.

Where appropriate, Ecology may determine that additional source control efforts are required to prevent contamination of the Lower Duwamish Waterway sediments. These requirements may result in additional costs for the appropriate parties.

Property owners, developers, industry and municipalities may also be required to implement cleanup of soil and/or groundwater contamination that may impact Lower Duwamish Waterway sediments. Under WAC 173-340 the Model Toxics Control Act, parties performing cleanups are required to provide all funds necessary. Ecology project management oversight is billed to parties performing cleanups under formal Ecology cleanup orders, and for cleanups proceeding under the Voluntary Cleanup Program. Municipalities performing cleanups may apply to Ecology for Remedial Action Grants to help offset some of the costs to local taxpayers.

Final Cleanup Action Decision Memo

After carefully considering all comments summarized above, Ecology has determined that no changes in the May 17, 2002 draft of the Cleanup Action Decision Memo are necessary. The Cleanup Action Decision Memo, which determines that the Duwamish/Diagonal sediment cleanup project is consistent with WAC 173-204 Sediment Management Standards, has been finalized as of July 25, 2002.

As noted in the introduction to this Responsiveness Summary, and in the Cleanup Action Decision Memo, Ecology and the U.S. Environmental Protection Agency will continue to work with King County and the Elliott Bay/Duwamish Restoration Panel to address project source control, site boundary and post-cleanup monitoring issues.

Ecology would like to thank all of those who provided comments, those who attended the public meeting to discuss this project, and the Duwamish River Cleanup Coalition for co-hosting the public meeting.

For Further Information

If you have questions about this Responsiveness Summary or Lower Duwamish Waterway source control, please contact Ecology project manager Rick Huey at 425-649-7256, or at rhue461@ecy.wa.gov.

For additional technical information about the D/D sediment cleanup project, please contact King County project manager Priscilla Hackney at 206-684-1791 or priscilla.hackney@metrokc.gov, and King County sediment specialist Pat Romberg at 206-296-8251 or pat.romberg@metrokc.gov.

For further information about the Lower Duwamish Waterway Superfund project, please contact U. S. EPA project manager Allison Hiltner at 206-545-1130 or hiltner.allison@epa.gov.